

Work Order ID 56354

February 19, 2010 8:36:26 AM



Page 1

Item ID: D2893-1

Accept



Setup Start



Revision ID:

Stop



Item Name: 2.75 Support

Start Date: 2/19/10 Start Qty: 20.00



Cust Item ID:

Required Date: 2/25/10 Req'd Qty: 20.00

Customer:

Reference:

Run Start



Approvals: Process Plan: *M*

Date: 10-2-19

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D2893	Rev B								

100

0.00



HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

0.00

HAAS CNC vertical machine #1

Machine as per Folio FA081 Tumble & Deburr

MW / *DIP*
10/02/25

20 *Ø*

110

0.00



QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

DIP 10/02/25
MW

20 *Ø*

120

0.00



QC8- Inspect parts - second check

QC

Memo

0.00

Quality Control

G.A 10/03/01

20 *Ø*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

130



Powdercoat

Powder Coating

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

M113170

=> M 10/03/03

(X20)

Ø

Memo

0.00

Mask Inside Bore for Primming START TIME: 2:30pm
400°F OVEN TEMPERATURE: 2:00pm FINISH
TIME: 2:00pm

140



QC

Quality Control

QC3- Inspect Part Finish

0.00

BK 10 CB-3

(20)

Memo

0.00

150



SprayPaint

Spray Painting

SprayPaint

0.00

0.00

Memo

Prime inside surface as per Dwg D2893 and QSI 005 4.3

M 10 03 29 (20)

W/O:		WORK ORDER CHANGES					
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Required Date: 2/25/10 Req'd Qty: 20.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160 QC Quality Control	QC14- Inspect Spray Paint Memo	0.00 0.00				20			1003-30
170 Packaging Packaging	Identify as per dwg & Stock Location: <i>X-1003 PAINT</i> Memo	0.00 0.00				<i>ml</i>	<i>10</i>	<i>03</i>	<i>30</i> (20)
180 QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 0.00							10/03/31 <i>df</i> <i>pl</i> 10-2-31 (20)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

February 19, 2010 8:36:30 AM

Page 1

Work Order ID: 56354



Parent Item: D2893-1



Parent Item Name: 2.75 Support

Start Date: 2/19/10

Required Date: 2/25/10

Comments: IPP: C02.11.26 Reformat; Added P/O KJ
IPP D 06.04.19 removed alodine EC
IPP Rev:E Added priming as per Rev B 07-04-30 JLM
IPP F 08.03.19 Re-format EC verified by: DD

Start Qty: 20.00

Required Qty: 20.00

DSK078



Manufactured No

100

Each

10.0000

10.0000



D2893-1 TURNING DETAIL

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

MAT

53730

10

10

MM

10/02/24

10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	56354
Description: Ø2.750 Support		Part Number:	D2893-1
Inspection Dwg: D2893	Rev: B	Page 1 of 1	

FIRST ARTICLE INSPECTION DIMENSION SHEET

☒ First Article ☐ Prototype

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	5
HAAS Section								
AA	2.985	3.005		2.993	2.993	2.990	2.991	3.000
AB	0.440	0.460		0.450	0.450	0.450	0.450	0.444
AC	0.125	0.160		0.140	0.140	0.140	0.140	0.138
AD	0.040	0.060		0.050	0.050	0.050	0.050	0.050
AE	0.188	0.193		0.188	0.188	0.188	0.188	0.188
AF	0.125	0.160		0.144	0.144	0.141	0.141	0.156
AG	0.140	0.160		0.160	0.160	0.150	0.149	0.159
AH	1.360	1.400		1.368	1.368	1.368	1.371	1.383
AI	0.040	0.060		0.050	0.050	0.050	0.050	0.040
AJ	1.190	1.230		1.213	1.210	1.215	1.217	1.223
AK	0.010	0.020		0.010	0.010	0.010	0.010	0.010
AL	0.053	0.073		0.060	0.060	0.060	0.060	0.060
AM	0.240	0.260		0.250	0.250	0.250	0.250	0.250
AN	2.518	2.538		2.528	2.528	2.528	2.528	2.528
AO	84.39	90.39		87.39	87.39	87.39	87.39	87.39
AP	0.261	0.266		0.266	0.266	0.266	0.266	0.266
AQ	0.053	0.073		0.063	0.063	0.063	0.063	0.063
AR								
AS								
AT								
Accept/Reject								

Measured by:	DJP / MME	Date:	10/02/25
Audited by:	K.A 10/03/01	Date:	10/03/01
Prototype Approval:		Date:	

Rev	Date	Change	Revised by	Approved
A	02.12.13	New Issue	KJ/RF	
B	07.05.08	Dimension AP revised	KJ/JLM	
C	08.04.21	Reformat	KJ/JLM	

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 56354
Description: 2.750 Support		Part Number: D2893-1
Inspection Dwg: D2893 Rev: B		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance		6	7	8	9	10
	Min	Max					
AA	2.985	3.005	3.001	3.005	2.999	3.000	2.993
AB	.440	.460	.445	.445	.442	.453	.450
AC	.125	.160	.135	.138	.135	.137	.146
AD	.040	.060	.047	.049	.056	.049	.049
AE	.188	.193	.190	.190	.190	.190	.190
AF	.125	.160	.155	.158	.155	.156	.149
AG	.140	.160	.154	.156	.153	.153	.155
AH	1.360	1.400	1.3800	1.379	1.386	1.388	1.373
AI	.040	.060	.045	.044	.048	.043	.049
AJ	1.190	1.230	1.215	1.210	1.213	1.210	1.216
AK	.010	.020	.010	.010	.010	.010	.010
AL	.053	.073	.063	.063	.063	.063	.063
AM	.240	.260	.250	.250	.250	.250	.250
AN	2.518	2.538	2.528	2.528	2.528	2.528	2.528
AO	87.39	90.39	87.39	87.39	87.39	87.39	87.39
AP	.261	.266	.264	.266	.266	.266	.266
AQ	.053	.073	.063	.063	.063	.063	.063
AR							
AS							
AT							

Measured by: MME	Audited by: K.A	Prototype Approval:	N/A
Date: 10/02/08	Date: 10/03/01	Date:	N/A

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	

DART AEROSPACE LTD		Work Order: 56354
Description: Ø 2.750 Support		Part Number: D2893-1
Inspection Dwg: D2893 Rev: B		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance		11	12	13	14	15
	Min	Max					
AA	2.785	3.005	2.996	2.994	2.994	2.997	2.999
AB	.440	.460	.448	.445	.445	.446	.445
AC	.125	.160	.147	.143	.144	.143	.144
AD	.040	.060	.050	.048	.049	.049	.050
AE	.188	.193	.190	.190	.190	.190	.190
AF	.125	.160	.157	.145	.152	.150	.147
AG	.140	.160	.150	.150	.156	.155	.155
AH	1.320	1.400	1.384	1.375	1.374	1.377	1.377
AI	.040	.060	.047	.050	.050	.052	.050
AJ	1.190	1.230	1.212	1.218	1.219	1.222	1.220
AK	.010	.020	.010	.010	.010	.010	.010
AL	.053	.073	.063	.063	.063	.063	.063
AM	.240	.260	.250	.250	.250	.250	.250
AN	2.518	2.538	2.528	2.528	2.528	2.528	2.528
AO	84.39	90.39	87.39	87.39	87.39	87.39	87.39
AP	.261	.266	.266	.266	.266	.266	.266
AQ	.053	.073	.063	.063	.063	.063	.063

Measured by: MMJ	Audited by: MA	Prototype Approval: N/A
Date: 10/02/28	Date: 10/03/01	Date: N/A

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	

DART AEROSPACE LTD		Work Order: 56354
Description: 2.750 Support		Part Number: D2893-1
Inspection Dwg: D2893 Rev: B		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

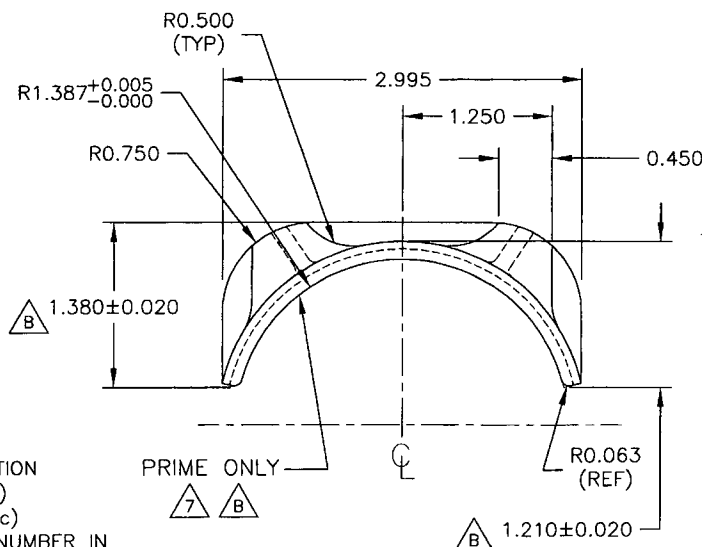
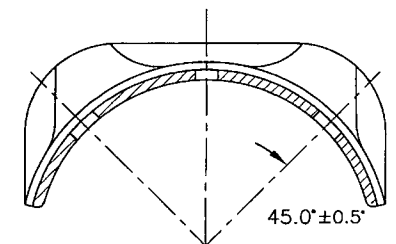
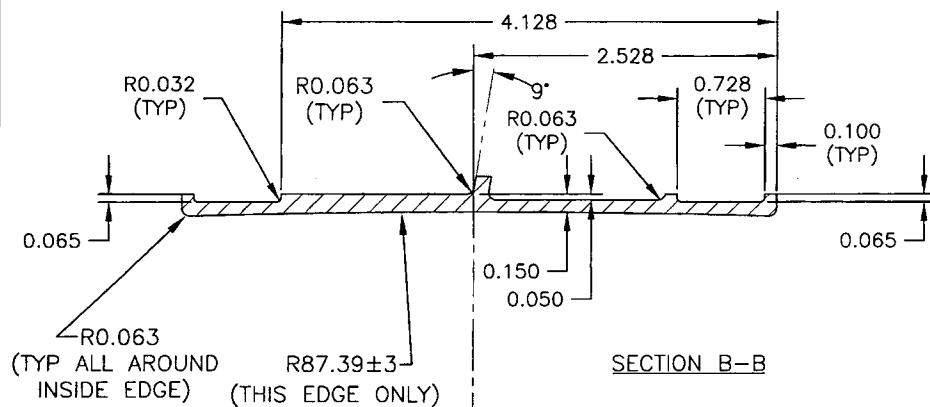
☒ First Article ☐ Prototype

Drawing Dimension	Tolerance		16	17	18	19	20
	Min	Max					
AA	2.985	3.005	2.993	2.996	2.997	2.997	2.998
AB	.440	.460	.442	.447	.450	.456	.445
AC	.125	.160	.147	.136	.135	.138	.144
AD	.040	.060	.051	.049	.049	.049	.049
AE	.188	.193	.190	.190	.190	.190	.190
AF	.125	.160	.148	.148	.147	.149	.144
AG	.140	.160	.148	.152	.150	.154	.152
AH	1.360	1.400	1.378	1.374	1.375	1.377	1.377
AI	.040	.060	.049	.051	.050	.048	.049
AJ	1.190	1.230	1.22	1.218	1.218	1.218	1.22
AK	.010	.020	.010	.010	.010	.010	.010
AL	.053	.073	.063	.063	.063	.063	.063
AM	.240	.260	.250	.250	.250	.250	.250
AN	2.518	2.538	2.528	2.518	2.518	2.518	2.518 2.528
AO	84.39	90.39	87.39	87.39	87.39	87.39	87.39
AP	.261	.266	.266	.266	.266	.266	.266
AQ	.053	.073	.063	.063	.063	.063	.063

Measured by: MW	Audited by: H.A	Prototype Approval:	N/A
Date: 10/03/01	Date: 10/03/01	Date:	N/A

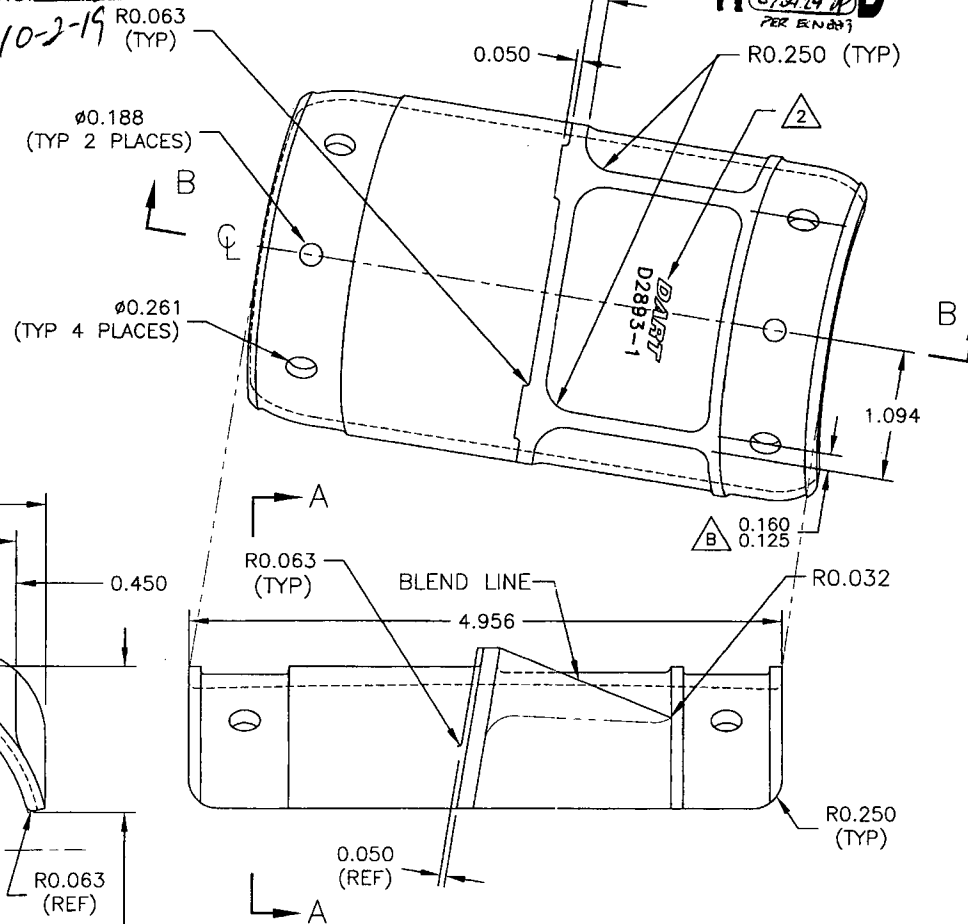
Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	

SHOP COPY
 RETUP 110
 ENGINE 110
 UNCONTROLLED COPY
 SUBJECT TO APPROVAL



WITHOUT NOTICE
 WORK ORDER
 NO. 56354

10-2-19



RELEASED
 67429 P
 PER EN 883

D2893-1

- 1) MATERIAL: 17-4 PH STAINLESS STEEL
 HEAT TREAT TO H900 CONDITION
 (900°F FOR 1 HR, AIR COOL)
 MIN UTS = 170 KSI (38 HRC)
- 2) IDENTIFY WITH DART LOGO AND PART NUMBER IN
 THIS AREA WITH 0.125 HIGH LETTERING 0.010-0.020 DEEP
- 3) BREAK ALL UNMARKED SHARP EDGES 0.010 TO 0.020
- 4) PART IS SYMMETRIC ABOUT CENTERLINE
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES
- 7) FINISH: POWDER COAT WHITE (REF. 4.3.5.2) PER DART QSI 005 4.3
 PRIME INSIDE SURFACE AS SHOWN PER DART QSI 005 4.2

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 PERSON WITHOUT WRITTEN PERMISSION FROM
 DART AEROSPACE LTD.

B	07.03.16	UPDATE DIMS AS MFG., PRIME INSIDE
A	01.01.10	NEW ISSUE
DESIGN	97	DRAWN BY
CHECKED	11	APPROVED
DATE	07.03.16	TITLE
		02.750 SUPPORT
		SCALE
		1:1

DART DART AEROSPACE LTD.
 MARKHAM, ONTARIO, CANADA

DRAWING NO. D2893
 REV. B
 SHEET 1 OF 1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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